

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of	:	Docket No. 0074-537949
	:	
Simon Anthony Brown et al.	:	Confirmation No. 4961
	:	
U.S. Appln. No. 10/573,123	:	
	:	
Filed: 11/13/2006	:	
	:	
For: Etch Masks Based on Template-Assembled :	:	
Nanoclusters	:	

**INFORMATION DISCLOSURE STATEMENT**

In compliance with the Duty of Disclosure set forth in 37 C.F.R. §1.56, Applicants are submitting herewith Forms PTO/SB/08A and 08B with this statement.

Please note that this application is the U.S. national phase of International Patent Application No. PCT/NZ2004/000230, filed September 23, 2004. An International Search Report was established for this international application and was published with the international application on March 31, 2005. A copy of the International Search Report and the references cited therein were received by the U.S. Patent and Trademark Office as indicated on Form PTO/DO/EO/903 mailed on November 29, 2006. The references cited in the International Search Report of the international application are listed on the Forms PTO/SB/08A and 08B, but are not enclosed herewith so that they can be printed on the face of the patent when it issues.

This submission is being made in accordance with 37 C.F.R. §1.97 and is believed to be in full compliance with the requirements of 37 C.F.R. §1.98.

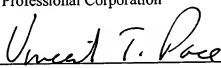
Applicants respectfully request full and proper consideration of the listed information

**In re the Application of Simon Anthony Brown et al.**  
**Application No. 10/573,123**  
**Docket No. 0074-537949**

during examination of the application, and that the listed information be printed on any patent which issues therefrom.

Respectfully submitted,

DANN, DORFMAN, HERRELL AND SKILLMAN  
A Professional Corporation

By   
Vincent T. Pace  
PTO Registration No. 31,049

Tel.: 215-563-4100  
Fax: 215-563-4044  
e-mail: [vp@ddhs.com](mailto:vp@ddhs.com)

Enclosure: Form PTO/SB/08A and 08B

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

## Complete if Known

Application Number	10/573,123
Filing Date	11/13/2006
First Named Inventor	Simon Anthony Brown
Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	0074-537949

Sheet 1 of 2

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		S.M. SZE, "Semiconductor Devices - Physics and Technology," pp. 428-451, Wiley, New York, 1985	
		T. HAATAINEN et al., "Pattern Transfer using Step&Stamp Imprint Lithography," Physica Scripta, 2003	
		M. COLBURN et al., "Step and Flash Imprint Lithography: A New Approach to High-Resolution Patterning," Proc. SPIE, Vol. 3676, 1999	
		D-Y KHANG et al., "Room-temperature imprint lithography by solvent vapor treatment," Appl. Phys. Letters, Vol. 76, No. 7, 2000	
		M. LI et al., "Direct three-dimensional patterning using nanoimprint lithography," Appl. Phys. Letters, Vol. 78, No. 21, 2001	
		G.M. FRANCIS et al., "Diffusion controlled growth of metallic nanoclusters at selected surface sites," J. Appl. Phys., Vol. 79, No. 6, 1996	
		W.A. DE HEER, "The physics of simple metal clusters: experimental aspects and simple models," Rev. of Mod. Phys., Vol. 65, No. 3, 1993	
		I.M. GOLDBY et al., "Diffusion and aggregation of size-selected silver clusters on a graphite surface," Appl. Phys. Lett., Vol. 69, No. 19, 1996	
		S.J. TANS et al., "Room-temperature transistor based on a single carbon nanotube," Nature, Vol. 393, 1998	
		H.D. CHOPRA et al., "Ballistic magnetoresistance over 3000% in Ni nanocontacts at room temperature," Phys. Rev., Vol. B 66, 2002	

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

## Complete if Known

Application Number	10/573,123
Filing Date	11/13/2006
First Named Inventor	Simon Anthony Brown
Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	0074-537949

Sheet 2

of 2

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		C.Z. LI et al., "Molecular detection based on conductance quantization of nanowires," Appl. Phys. Letters, Vol. 76, No. 10, 2000	
		I.M. GOLDBY et al., "Gas condensation source for production and deposition of size-selected metal clusters," Rev. Sci. Instrum., Vol. 68, No. 9, 1997	
		H. ISHIKURO et al., "Fabrication of Nano-Scale Point Contact Metal-Oxide-Semiconductor for Field-Effect-Transistors Using Micrometer-Scale Design Rule," Jpn.J.Appl.Phys., 1999	
		B. VON ISSENDORFF et al., "A new high transmission infinite range mass selector for cluster and nanoparticle beams," Rev. Sci. Instrum., Vol. 70, No. 12, 1999	
		B. HALL, "An installation for the study of unsupported ultrafine particles by electron diffraction, with application to silver: observation of multiply twinned particle	
		structures," Ecole Polytechnique Federale de Lausanne, Switzerland, 1991	
		J. SCHMELZER et al., "Finite-Size Effects in the Conductivity of Cluster Assembled Nanostructures," Phys. Rev. Letters, Vol. 88, No. 22, 2002	
		T. MULLER et al., "Template-directed self-assembly of buried nanowires and the pearling of instability," Mat. Sci. and Eng., C 19, 2002	
		J.G. PARTRIDGE et al., "Templated cluster assembly for production of metallic nanowires in passivated silicon V-grooves," Micro. Eng., 2004	
		T. TADA et al., "Channel waveguides fabricated in 2D photonic crystals of Si nanopillars," Micro. Eng., 2002	

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-785-9199) and select option 2.

**Complete if Known**

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Application Number	10/573,123
Filing Date	11/13/2006
First Named Inventor	Simon Anthony Brown
Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	0074-537949

[illegible]

Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Ref
		Country Code*Number + Kind Code <sup>6</sup> (if known)	MM-DD-YYYY			
		WO 2004/069735	08/19/2004	Nanoduster Devices Ltd.		
		PCT/NZ02/00160	02/27/2003	Canterprise Limited		

Date  
Considered

Translacion is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including reviewing, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.